State of Health in the EU
Denmark
Country Health Profile 2023
The Country Health Profile Series

The State of Health in the EU’s Country Health Profiles provide a concise and policy-relevant overview of health and health systems in the EU/European Economic Area. They emphasise the particular characteristics and challenges in each country against a backdrop of cross-country comparisons. The aim is to support policy makers and influencers with a means for mutual learning and voluntary exchange. For the first time since the series began, the 2023 edition of the Country Health Profiles introduces a special section dedicated to mental health.

The profiles are the joint work of the OECD and the European Observatory on Health Systems and Policies, in co-operation with the European Commission. The team is grateful for the valuable comments and suggestions provided by the Health Systems and Policy Monitor network, the OECD Health Committee and the EU Expert Group on Health Systems Performance Assessment (HSPA).

Data and information sources

The data and information in the Country Health Profiles are based mainly on national official statistics provided to Eurostat and the OECD, which were validated to ensure the highest standards of data comparability. The sources and methods underlying these data are available in the Eurostat Database and the OECD health database. Some additional data also come from the Institute for Health Metrics and Evaluation (IHME), the European Centre for Disease Prevention and Control (ECDC), the Health Behaviour in School-Aged Children (HBSC) surveys and the World Health Organization (WHO), as well as other national sources.

The calculated EU averages are weighted averages of the 27 Member States unless otherwise noted. These EU averages do not include Iceland and Norway.

This profile was finalised in September 2023, based on data that was accessible as of the first half of September 2023.

Demographic and socioeconomic context in Denmark, 2022

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<td>Relative poverty rate³ (%)</td>
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<td>Unemployment rate (%)</td>
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1. Number of children born per woman aged 15-49. 2. Purchasing power parity (PPP) is defined as the rate of currency conversion that equalises the purchasing power of different currencies by eliminating the differences in price levels between countries. 3. Percentage of persons living with less than 60% of median equivalised disposable income. Source: Eurostat Database.

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1 Highlights

Health Status
Life expectancy in Denmark increased more than the EU average in the decade before the COVID-19 pandemic. It fell slightly during the pandemic, but much less than in most other EU countries. Cancer is the main cause of death in Denmark, and lung cancer remains the most frequent cause of death by cancer.

Risk Factors
Behavioural risk factors were responsible for at least 40% of deaths in Denmark in 2019. Although tobacco smoking rates have decreased substantially over the past two decades, they remain higher than in other Nordic countries. Over one in three (38%) Danes engaged in regular heavy drinking in 2019 – the highest proportion in the EU. Obesity among adults has gone up, reaching 16% in 2019 – a rate similar to the EU average. Risk factor exposure varies substantially by socioeconomic status.

Health System
Health spending per capita in Denmark was higher than the EU average in 2021 (EUR 4,325 compared to EUR 4,029, adjusted for differences in purchasing power), although as a share of GDP it was slightly lower (10.8% compared to an EU average of 11.0%). Public spending made up 85% of overall health expenditure in Denmark, which is a higher share than the EU average (81%).

Accessibility
Unmet needs for healthcare in Denmark during the pandemic were significantly lower than in most other EU countries. Denmark was one of the few EU countries nearly able to maintain the number of doctor consultations during the first year of the pandemic, thanks to extensive use of teleconsultations.

Resilience
Following the intermittent suspension of elective care during the pandemic, the number of non-urgent surgical procedures fell in 2020 and 2021, mirroring trends in other EU countries. Additional funds have been assigned to regions to tackle the backlog in elective care resulting from the pandemic. However, existing staff shortages hinder efforts to alleviate waiting times for elective care.

Mental Health
Anxiety and depression disorders are the most frequent mental health issues in Denmark. The gender and socioeconomic gaps in depression are substantial: people on lower incomes, especially women, are about three times more likely to report depression. A new 10-year plan to improve mental health in Denmark was adopted in 2022, including a set of indicators to monitor progress.
2 Health in Denmark

Life expectancy is higher than the EU average, but lower than in most other Nordic countries

In 2022, life expectancy at birth in Denmark was 81.3 years – more than half a year higher than the EU average (80.7 years), but lower than in many other Nordic and western European countries (Figure 1). Life expectancy fell by 0.2 years between 2019 and 2022, but this reduction was less than the EU average (0.6 years).

On average, the life expectancy of Danish women was nearly four years longer than men in 2022 (83.2 years compared to 79.5 years). However, this gender gap in longevity has narrowed by one year since 2000 and is less than the EU average gap of 5.4 years.

Figure 1. Life expectancy is above the EU average, but lags behind many other Nordic countries

Notes: The EU average is weighted. The 2022 data are provisional estimates from Eurostat that may be different from national data and may be subject to revision. Data for Ireland refer to 2021.
Source: Eurostat Database.

Cancer, circulatory diseases and respiratory diseases remain the leading causes of death

The steady increase in life expectancy in Denmark since 2000 has been driven by reductions in mortality rates from frequent causes of death like cancers, cardiovascular diseases and respiratory diseases (Figure 2). Despite the reductions, these remained the main causes of death in 2020. Cancer contributed to over one quarter of all deaths. Lung cancer remains the most frequent cause of death by cancer, followed by colorectal cancer. This has prompted a number of initiatives to prevent cancer (such as tobacco smoking reduction policies) and to promote better access to cancer screening and treatment (see Section 5.1).

In 2020, COVID-19 accounted for about 2% of all deaths in Denmark. Over 90% of these deaths from COVID-19 were among people aged 65 and over.

The broader indicator of (all-cause) excess mortality shows that excess deaths in 2020 were only about 3.5% higher in Denmark than in the previous five years. However, excess mortality increased in 2021 (6.4%), and rose further in 2022 (10.6%) (Figure 3). The increase in 2022 was driven by a substantial rise in the number of deaths from COVID-19.

A quarter of Danes aged 65 and over have multiple chronic conditions

As in other EU countries, Denmark has experienced a demographic shift towards an older population over the past two decades, with the proportion of people aged over 65 rising from 15% of the total population in 2000 to 20% in 2020. It is projected to reach 26% by 2050.

In 2020, Danish women at age 65 could expect to live another 21 years, while men could expect to
live another 18 years. However, the gender gap in healthy life years (defined as disability-free life expectancy) is much smaller (1.5 years), as Danish men tend to live a larger share of their remaining years of life free from activity limitations (Figure 4).

Nearly a quarter of men and women aged 65 and over in Denmark reported being afflicted by more than one chronic condition in 2020, which is considerably below the EU average, particularly among women. The share of Danish women aged 65 and over reporting limitations in daily activities is larger than the share of men, but remains lower than the EU average.

Cancer incidence rates are higher in Denmark than in the EU as a whole

According to estimates from the Joint Research Centre based on incidence trends from previous years, more than 43 000 new cases of cancer were expected to be diagnosed in Denmark in 2022. Age-standardised incidence rates for all cancer types were expected to be higher than the EU averages for both men and women (Figure 5). The main cancer sites among men are prostate, colorectal and lung, while among women breast cancer is the most frequently diagnosed cancer, followed by colorectal and lung cancer. Although cancer incidence has increased over the past few decades, in part thanks to more widespread screening, survival rates for several types of cancer have improved due to earlier diagnosis and improved treatment (OECD, 2023b).
**Figure 4. The gender gap in healthy life years at age 65 is smaller than in life expectancy**

Life expectancy and healthy life years at 65

- Men
  - Healthy life years: 18.4 years (57%)
  - Life expectancy with activity limitation: 17.4 years (55%)

- Women
  - Healthy life years: 21.2 years (56%)
  - Life expectancy with activity limitation: 21.0 years (48%)

Proportion of people aged 65 and over with multiple chronic conditions

- Men
  - Denmark: 24%
  - EU: 32%

- Women
  - Denmark: 27%
  - EU: 40%

Limitations in daily activities among people aged 65 and over

- Men
  - Denmark: 17%
  - EU: 22%

- Women
  - Denmark: 23%
  - EU: 30%

Sources: Eurostat Database (for life expectancy and healthy life years) and SHARE survey wave 8 (for chronic conditions and limitations in daily activities).

Data refer to 2020.

**Figure 5. More than 43 000 cancer cases in Denmark were expected to be diagnosed in 2022**

Age-standardised rate (all cancer): 811 per 100 000 population

EU average: 684 per 100 000 population

Age-standardised rate (all cancer): 665 per 100 000 population

EU average: 488 per 100 000 population

Notes: Non-melanoma skin cancer is excluded. Uterus cancer does not include cancer of the cervix.

Source: ECIS – European Cancer Information System.

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**Denmark EU Denmark EU Denmark EU Denmark EU**

- Melanoma skin
  - Denmark: 3%
  - EU: 25%

- Kidney
  - Denmark: 4%
  - EU: 4%

- Others
  - Denmark: 25%
  - EU: 25%

- Bladder
  - Denmark: 8%
  - EU: 5%

- Prostate
  - Denmark: 23%
  - EU: 30%

- Non-Hodgkin lymphoma
  - Denmark: 4%
  - EU: 4%

- Breast
  - Denmark: 15%
  - EU: 15%

- Lung
  - Denmark: 10%
  - EU: 5%

Notes: Non-melanoma skin cancer is excluded. Uterus cancer does not include cancer of the cervix.
3 Risk factors

Four in ten deaths in Denmark can be attributed to behavioural risk factors

More than 40% of deaths in Denmark in 2019 can be linked to behavioural risk factors, including tobacco smoking, unhealthy diets, alcohol consumption and low physical activity (Figure 6).

Environmental factors such as air pollution also account for a considerable number of deaths: an estimated 1 500 deaths in 2019 were attributed to exposure to fine particulate matter (PM$_{2.5}$) and ozone alone, representing 3% of all deaths.

Figure 6. Behavioural and environmental factors account for over 40% of all deaths in Denmark

Notes: The overall number of deaths related to these risk factors is lower than the sum of each one taken individually, because the same death can be attributed to more than one risk factor. Dietary risks include 14 components such as low fruit and vegetable intake, and high sugar-sweetened beverages consumption. Air pollution refers to exposure to PM$_{2.5}$ and ozone.

Sources: IHME (2020), Global Health Data Exchange (estimates refer to 2019).

Tobacco smoking rates have declined sharply and are now relatively low in Denmark

The proportion of Danish adults who smoke tobacco daily has declined sharply over the past two decades, from 30% in 2000 to 14% in 2021, yet it remains higher than in other Nordic countries. This reduction has been achieved in part through increases in tobacco prices and by imposing a ban on smoking in public spaces (see Section 5.1). Smoking rates among adolescents are also now lower in Denmark than in most other EU countries, while remaining high compared to other Nordic countries. In 2022, 13% of Danish 15-year-olds reported that they had smoked cigarettes in the past month. However, tobacco products other than traditional cigarettes have become more popular in recent years, especially among young adults. About 4% of 15-24-year-olds reported regular use of e-cigarettes in 2021, which is close to the EU average.

Heavy drinking among Danish adults and adolescents remains a public health concern

More than one in three Dane adults reported regular heavy drinking in 2019 (38%), the highest proportion in the EU. As in other EU countries, heavy drinking is much more frequent among men than women: one in two men reported regular heavy drinking compared to one in four women. No progress has also been achieved in tackling excessive alcohol consumption among adolescents. In 2022, 45% of 15-year-olds reported that they had been drunk more than once in their life – the highest proportion among all EU countries.

Overweight and obesity rates are on the rise in Denmark

Close to 16% of adults in Denmark were defined as obese in 2019, based on the European Health Interview Survey, a share that has increased from 14% in 2014 and is now equal to the EU average.

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1 Heavy drinking is defined as consuming six or more alcohol drinks on a single occasion for adults.
2 More recent data from a national health interview survey show a further rise in adult obesity rate to 18.5% in 2021.
Similarly, over 15% of 15-year-old adolescents were defined as overweight or obese in 2022, up from 12% in 2014, but that rate remained below the EU average of 21%.

Physical activity levels are relatively low among Danish adolescents but higher among adults

The proportion of Danish adolescents reporting that they engage in at least moderate physical activity each day was lower than in most EU countries in 2022. This lack of physical activity was particularly important among girls: only 9% of 15-year-old girls reported engaging in moderate-to-vigorous physical activity in 2022 – less than half the proportion among boys (21%). By contrast, the level of physical activity among adults was relatively high. Over half of Dane adults engaged in at least 2.5 hours of physical activity per week in 2019, one of the highest rates in the EU.

Fruit and vegetable consumption is generally high among adults, yet most Danes do not meet the recommended daily intake

More than one in four adults reported consuming at least five portions of fruit and vegetables per day in 2019, which is one of the highest proportions in the EU (Figure 7). Nonetheless, 90% of Danes did not meet the Danish Food Administration’s recommended fruit and vegetable intake of 600 g per day in 2019. Among adolescents, only about 40% of 15-year-olds reported consuming at least one vegetable daily in 2022 while this proportion was even lower for those reporting to eat at least one fruit per day (about 30%).

**Figure 7. Heavy alcohol consumption and low physical activity among adolescents are important public health issues**

![Figure 7](image)

Notes: The closer the dot is to the centre, the better the country performs compared to other EU countries. No country is in the white “target area” as there is room for progress in all countries in all areas.

Sources: OECD calculations based on HBSC survey 2022 for adolescents indicators; and EHIS 2019 for adults indicators.

Socioeconomic inequalities contribute to inequalities in risk factor exposure

As in other countries, most behavioural risk factors in Denmark are more common among people with lower education or income levels. In 2019, people with lower education levels smoked nearly twice as much as those with higher levels. Similarly, those with lower education levels were much more likely to be obese. The education gap in heavy drinking was smaller (Figure 8).

**Figure 8. People with lower education levels are more likely to smoke, be obese and drink heavily**

![Figure 8](image)

Notes: Low education is defined as people who have not completed secondary education (ISCED 0-2), whereas high education is defined as people who have completed tertiary education (ISCED 5-8).

Source: Eurostat Database (based on EHIS 2019).
4 The health system

Denmark’s universal tax-financed health system provides a comprehensive benefits package to all residents

The health system in Denmark is organised into three administrative levels: state, region and municipal. The state holds the overall regulatory, supervisory and fiscal functions. The five regions are responsible for hospitals and for planning and financing primary care services. The Association of Danish Regions represents the five regions in negotiations with the state and private providers, and plays a critical role in coordinating policy development across the regions. The 98 municipalities are responsible for rehabilitation, home and institutional long-term care, and public health. The relationship between the state, region and municipal levels is not hierarchical but collaborative (Birk et al., 2023).

Primary care services are delivered by self-employed general practitioners (GPs), who operate according to a national agreement about tariffs and regional plans that specify capacity and focus areas. GPs are the first point of contact for patients and have a key gatekeeping role to more specialised services. Most hospitals are owned and managed by the regions. They work within detailed targets for waiting times and financial resources. If the regions cannot meet the waiting time guarantees, they must offer patients treatment in a private hospital or clinic. The individual regions can negotiate additional local agreements with private hospitals to increase capacity in specific areas.

Most health spending comes from public sources, with voluntary health insurance playing only a minor role

In the years before the pandemic, health spending as a share of GDP in Denmark had remained relatively stable at around 10.2 % of GDP, but this share increased during the COVID-19 pandemic, mainly due to increases in health spending. In 2021, health spending in Denmark accounted for 10.8 % of GDP, which nonetheless remained slightly below the EU average of 11.0 %.

However, as shown in Figure 9, health spending per person in Denmark in 2021 was higher than the EU average, at EUR 4 325 per capita (adjusted for differences in purchasing power) compared to EUR 4 029. Most health spending (85 % in 2021) was funded by government through general taxation. This proportion of public funding has been stable over the past 15 years, and is higher than the EU average (81 %). Private spending accounted for the remaining 15 % of health expenditure in 2021: 13 % was paid out of pocket, while the remaining 2 % was covered through voluntary health insurance (VHI). Complementary VHI is purchased by over 40 % of the population to cover user charges for outpatient medicines, dental care and other services.

Figure 9. Health spending per person in Denmark is relatively high

![Figure 9. Health spending per person in Denmark is relatively high](image)

Note: The EU average is weighted.
Source: OECD Health Statistics 2023 (data refer to 2021, except Malta (2020)).
Most health spending is allocated to outpatient care, while pharmaceutical spending is among the lowest in the EU

The highest share of health spending is allocated to outpatient care (32% of total health expenditure or EUR 1,403 per person in 2021), followed by inpatient and long-term care (Figure 10). The proportion of spending on outpatient pharmaceuticals and medical devices is low, accounting for only 10% of total health expenditure in 2021, compared to an EU average of 17%. Denmark has had strict cost-containment measures for pharmaceutical spending in place for many years. Generic prescribing and substitution are widely implemented, and value-based purchasing has been conducted jointly by all five regions since 1990. Nevertheless, the addition of pharmaceutical spending in hospitals (which is reported here under inpatient care) would increase overall spending on pharmaceuticals significantly (about 44% of total pharmaceutical spending was in hospitals in 2021).

Spending on public health and prevention in Denmark increased greatly during the pandemic, and accounted for nearly 9% of total health spending in 2021 – a higher share than what was usually spent on public health and prevention before the pandemic (less than 3%).

Figure 10. Health spending is much higher on outpatient care than inpatient care

![Figure 10. Health spending is much higher on outpatient care than inpatient care](image)

Notes: 1. Includes home care and ancillary services (e.g. patient transportation); 2. Includes curative-rehabilitative care in hospital and other settings; 3. Includes only the health component; 4. Includes only the outpatient market; 5. Includes health system governance and administration and other spending; 6. Includes only spending for organised prevention programmes.

Source: OECD Health Statistics 2023 (data refer to 2021).

The number of hospital beds in Denmark has decreased greatly since the 1990s

In 2021, Denmark had 2.5 hospital beds per 1,000 population, which was much lower than the EU average (4.8 per 1,000) but a greater number than in Sweden (2.0 per 1,000). The reduction in the number of beds over the past few decades was most significant in psychiatry, largely because of a policy of de-institutionalisation. Beds in psychiatric hospitals have gradually been replaced by community mental health services (see Section 6).

Health workforce shortages are the main capacity constraint in the health system

Despite having a relatively high number of practising doctors and nurses per population (Figure 11), Denmark has shortages of health professionals – particularly of GPs and hospital doctors in some specialty areas and nurses. Measures have been taken to address some of these workforce shortages (see Section 5.2).
**Figure 11. Denmark has higher numbers of doctors and nurses per population than the EU average**

Notes: The EU average is unweighted. The data on nurses include all categories of nurses (not only those meeting the EU Directive on the Recognition of Professional Qualifications). In Portugal and Greece, data refer to all doctors licensed to practise, resulting in a large overestimation of the number of practising doctors (e.g. of around 30% in Portugal). In Greece, the number of nurses is underestimated as it only includes those working in hospitals.

Source: OECD Health Statistics 2023 (data refer to 2021 or nearest available year).

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**5 Performance of the health system**

**5.1 Effectiveness**

**Denmark fares better than most EU countries on avoidable mortality**

Denmark had relatively low rates of premature mortality from preventable and treatable causes in 2020 compared to other EU countries (Figure 12). This points to an effective public health and healthcare system in avoiding deaths from conditions that are deemed to be preventable or treatable through effective and timely treatment.

As in many other EU countries, preventable mortality rates are more than two times greater than treatable mortality rates. The leading causes of preventable mortality in Denmark in 2020 were lung cancer, chronic obstructive pulmonary disease and alcohol-related deaths. This signals that further tobacco and alcohol control policies could reduce these premature deaths.

**Recent tobacco and alcohol policies aim to prevent young Danes from smoking and drinking**

Over the past two decades, the proportion of daily smokers has fallen considerably in Denmark, partly due to tobacco control policies. However, the rising popularity of new tobacco products, such as e-cigarettes and chewing tobacco, especially among young adults, is a concern.

To curb smoking rates further, a national Tobacco Control Act was adopted in 2020. The price of a pack of cigarettes increased twice, from DKK 40 (EUR 5) to DKK 55 (EUR 7) in 2020, and then to DKK 60 (almost EUR 8) in 2022. Other recent tobacco control policies included removing cigarette and e-cigarette visibility at the point of purchase in 2021, restrictions on public smoking in 2021 and changes to tobacco product and e-cigarette packaging in 2022. The government also dedicated DKK 40 million (EUR 5.4 million) to 19 projects in 24 municipalities to prevent and reduce tobacco use among vulnerable people in 2020-23.
National efforts to reduce smoking have focused on younger generations, as set out in the 2019 National Action Plan against Children and Young People Smoking. A smoke-free youth generation by 2030 is also a key objective of the National Cancer Plan in Denmark. As a step towards achieving this target, a smoking ban in schools was implemented in 2021. To further prevent young people from smoking, Danish authorities proposed in March 2022 to ban the sale of cigarettes and nicotine products to any citizens born after 2010. This policy focus on young people led to a reduction in smoking rates of over one third between 2017 and 2021 among those aged 16-19.

Since Danes have a track record of being Europe's heaviest drinkers, the government has launched several initiatives to strengthen alcohol control policies. In March 2022, the Danish Health Authority tightened national advice on low-risk drinking for both young people and adults. The main recommendation is that those under the age of 18 are advised not to drink alcohol, and adults are advised to have no more than 10 drinks a week, with no more than 4 drinks per day. A parliamentary proposal has recommended raising the age threshold for the purchase of alcoholic beverages from 16 to 18, but this proposal has yet to be adopted.

The influenza vaccination rate among older people increased sharply during the pandemic

The COVID-19 pandemic raised the importance of increasing vaccination rates against influenza to minimise pressure on hospitals. Denmark achieved a sharp increase in the proportion of people aged 65 and over vaccinated again influenza: the rate went up from about 50% before the pandemic
to 75% during the 2020/21 vaccination campaign and 78% during the 2021/22 campaign (Figure 13).

The decision by the Danish Health Authority to offer flu vaccination free of charge to elderly people and other high-risk groups contributed to this rise during the 2020/21 and 2021/22 campaigns. Involvement of pharmacists in administering the vaccination since the pandemic also made it easier for people to get vaccinated. The challenge will be to maintain these high rates in the years ahead.

**Figure 13. The influenza vaccination rate among older people has sharply increased since the pandemic**

Graph showing the influenza vaccination rate among older people in Denmark and the EU from 2016/17 to 2021/22. The vaccination rate has increased significantly during the pandemic.

Sources: OECD Health Statistics 2023 and Eurostat Database.

### Screening rates for cancer are relatively high

Cancer screening in Denmark is organised at the national level and implemented at the regional level. Denmark offers three national screening programmes for breast, cervical, and colorectal cancers that are free of charge for participants. These programmes target Danish women aged 50–69 years for breast cancer every two years, women aged 23–64 for cervical cancer every three or five years (depending on the age group), and women and men aged 50–74 for colorectal cancer every two years.

Based on national programme data, cancer screening participation rates are relatively high compared to the EU averages. This is particularly the case for breast cancer screening: over 80% of Danish women aged 50–69 have been screened regularly for breast cancer in recent years compared to an EU average of less than 60%. The pandemic had a much more limited impact on breast cancer screening rates in Denmark than in many other EU countries. The share of Danish women who have regular cervical cancer screening (around 60% in recent years) is lower than for breast cancer, but nonetheless higher than the EU average. Regular colorectal cancer screening rates among Danes aged 50–74 also stood at around 60% in recent years, which is also above the EU average (Figure 14).

**Figure 14. Cancer screening rates in Denmark are relatively high**

Graphs showing breast, cervical, and colorectal cancer screening rates in Denmark and the EU from 2018 to 2022. Denmark has relatively high screening rates compared to the EU averages.

Note: Rates refer to the share of individuals within the target groups who have undergone screening in the last two years (or within the specific screening interval recommended in each country).

Source: OECD Health Statistics 2023 (based on national programme data).

However, data from the 2019 European Health Interview Survey (EHIS) show a steep gradient in cancer screening in Denmark by socioeconomic status for cervical cancer screening. Danish women with higher education or higher income levels were more likely to report having a cervical smear test in the past three years in 2019 than the least educated (OECD, 2023b).
### 5.2 Accessibility

**Extensive public coverage for medical services results in low levels of unmet needs**

All Danish residents, including registered immigrants and asylum-seekers, are automatically covered by the tax-funded national health system, while undocumented migrants have access to acute care only. The system covers most of the costs of medical services.

Only about 2% of the population reported unmet needs for medical care due to costs, distance to travel or waiting times in 2022, according to the EU-SILC survey. These unmet needs were mainly driven by waiting times. The gap in unmet medical needs between people in the lowest and highest income quintiles is significant, albeit slightly smaller than the EU average (Figure 15).

Unmet needs for dental care are higher, and were reported by 7.5% of Danes in 2022. Inequalities in unmet needs for dental care by income level are also much greater than for medical care: nearly 12% of Danes in the lowest income quintile reported unmet dental care needs compared to less than 2% of those in the highest quintile. Such unmet needs for dental care are mainly due to costs, as dental care is much less covered than medical care.

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**Figure 15. Unmet needs for medical care are low, but higher for dental care**

![Graph showing unmet needs for medical care and dental care by income quintiles in Denmark and other EU countries.](source)

- **Note:** Data refer to unmet needs for a medical or dental examination or treatment due to costs, distance to travel or waiting times.

- **Source:** Eurostat Database, based on EU-SILC (data refer to 2022, except Norway (2020) and Iceland (2018)).

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Results from Eurofound surveys carried out during the pandemic (in spring 2021 and spring 2022) show higher rates of unmet healthcare needs among the Danish population, with the rates increasing in 2022 compared to 2021, although they remained well below the EU average (Figure 16).³

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**Figure 16. Unmet healthcare needs remained relatively low during the pandemic**

![Graph showing unmet healthcare needs in Denmark and other EU countries during spring 2021 and spring 2022.](source)

- **Note:** The EU average is weighted.

- **Source:** Eurofound (2022).

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³ The data from the Eurofound survey are not comparable to those from the EU-SILC survey because of differences in methodologies.
The health benefits package is broad, but coverage remains relatively low for dental care. Overall, the nationally defined benefits package for healthcare in Denmark is broad and extensive (Figure 17). There is high coverage for inpatient and outpatient care, but coverage for dental care and pharmaceuticals remains fairly low, as is the case in many other EU countries.

**Figure 17. Coverage for dental care and pharmaceuticals is much more limited than for inpatient and outpatient care**

Government and compulsory insurance spending as proportion of total health spending by type of service

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<th>Type of Service</th>
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<tr>
<td>Inpatient care</td>
<td>92%</td>
<td>91%</td>
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<tr>
<td>Outpatient medical care</td>
<td>92%</td>
<td>78%</td>
</tr>
<tr>
<td>Dental care</td>
<td>35%</td>
<td>34%</td>
</tr>
<tr>
<td>Pharmaceuticals</td>
<td>42%</td>
<td>59%</td>
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Notes: Outpatient medical services mainly refer to services provided by generalists and specialists in the outpatient sector. Pharmaceuticals include prescribed and over-the-counter medicines and medical non-durables. The EU average is unweighted.
Source: OECD Health Statistics 2023 (data refer to 2021).

Lower coverage rates for pharmaceuticals and dental care lead to a concentration of out-of-pocket (OOP) expenditure in these two areas. Together, OOP spending on pharmaceuticals and dental care accounted for nearly half of total OOP spending in Denmark in 2021 (Figure 18).

An annual maximum copayment for people was introduced in January 2016 on expenses related to reimbursable pharmaceuticals. This maximum copayment has been reduced gradually: it went down from DKK 4 270 (EUR 570) per year in 2021 to DKK 3 075 (EUR 410) in 2023.

**Figure 18. The largest shares of OOP spending are on pharmaceuticals and dental care**

Addressing shortages of certain categories of health workers is a growing issue

As noted in Section 4 (see Figure 11 above), Denmark has more doctors and nurses per 1 000 population than the EU averages. While the number of doctors and nurses relative to population size has increased over the past decade, the growth in the number of nurses has been more modest. The growth in doctors relative to population size has been solely among specialists, while the density of GPs has remained unchanged. As a result, the share of GPs among all doctors decreased from 21 % in 2010 to 18 % in 2020 (OECD, 2023a).

In hospitals, staffing challenges in 2022 were mainly found among doctors in some specialty areas and specialist categories of nurses such as nurse anaesthetists, operating theatre nurses and intensive care nurses, with all regions having vacant positions in 2022 (Ministry of the Interior and Health, 2023a). Overall, in 2022, around 4 700 nursing positions were unfilled in hospitals. These workforce shortages have impeded the capacity to reduce the backlog of patients on waiting lists, and thereby to reduce waiting times for surgical interventions (see Section 5.3).
As part of the health reform package announced in spring 2022, the number of GP training positions was increased to increase the supply of GPs and respond to growing demands on primary care, although the effect will only be felt in a few years’ time.

A Robustness Commission (also referred to as the Health Resilience Commission) was also set up in August 2022 to come up with recommendations to address staff shortages. This Commission tabled its final report in September 2023. It put forward a set of 20 recommendations to increase the supply of health workers through education policies and greater retention of existing staff through improvements in working conditions, and also recommended to more effectively use the health workforce through more flexible work organisation and better use of technologies (Robustness Commission, 2023).

A growing issue has been retention of nurses in public hospitals. Between 2020 and 2022, the number of nurses employed in public hospitals decreased, with many moving to work in other healthcare facilities – notably in the municipal health sector and to a lesser extent in private hospitals (Ministry of the Interior and Health, 2023a).

**Denmark benefited from high levels of teleconsultations during the pandemic**

Even prior to the pandemic, teleconsultations between doctors and patients (e.g. through telephone consultations) were used extensively in Denmark. Thanks to this, Denmark was one of the few EU countries that was able to almost maintain the number of doctor consultations during the first year of the pandemic in 2020 (Figure 19). Since 1 January 2022, video consultations have become a permanent consultation option.

### 5.3 Resilience

The COVID-19 pandemic has proved to be the most significant disruption to health systems in recent decades. It has shed light on the vulnerabilities and challenges within countries’ emergency preparedness strategies and on their ability to provide healthcare services to their populations. In response to the enduring effects of the pandemic – as well as other recent crises, such as cost-of-living pressures and the impact of conflicts like the war against Ukraine – countries are implementing policies to mitigate the ongoing impacts on service delivery, invest in health system recovery and resilience, improve critical areas of the health sector, and fortify their preparedness for future shocks.

**Hospital admissions fell in 2020 and 2021 compared to pre-pandemic levels**

Before the COVID-19 pandemic, Denmark had fewer hospital beds per population than any other EU country except Sweden, at 2.5 per 1 000 population in 2019, and this number did not increase during the pandemic.

To address the sudden increase in demand for acute care caused by the virus, Denmark postponed non-urgent hospital care to create a buffer of excess resources (beds, staff and equipment) and reduce the risk of hospital outbreaks, although these temporary restrictions did not last as long as in most other countries (OECD, 2023c). These temporary contingency measures led to a reduction in hospital discharges in 2020 and 2021, which fell by about 8 % compared to 2019.

**Numbers of elective surgical procedures in Denmark fell in 2020 and 2021**

Following the intermittent suspension of elective care during the surge phases of COVID-19, the volume of non-urgent surgical procedures also fell in Denmark in 2020 and 2021. There were 3 900 fewer hip replacements (-8 %), 3 700 fewer knee replacements (-14 %) and 872 fewer breast cancer surgery procedures (-7 %) in 2021 than in 2019.

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4 In this context, health system resilience has been defined as the ability to prepare for, manage (absorb, adapt and transform) and learn from shocks (EU Expert Group on Health Systems Performance Assessments, 2020).
While these reductions were smaller than those in most other EU countries in 2020, the reductions in the volume of surgical interventions in Denmark continued in 2021, while surgical activity went back up in many other countries during the second year of the pandemic (Figure 20).

**Figure 20. Elective surgical procedures fell during the first two years of the pandemic in Denmark**

Waiting times for elective surgery increased markedly during the pandemic

At the beginning of the pandemic in spring 2020, the one-month waiting time guarantee for accessing diagnosis and treatment that had been in place in Denmark for many years was temporarily suspended – until September 2020 for psychiatric care and until March 2021 for other care. This led to marked increases in waiting times for elective surgical procedures. Between the first quarter of 2020 and the fourth quarter of 2022, waiting times for surgical operations increased overall by 50%:

from 43 days to 65 days (Ministry of the Interior and Health, 2023b). Focusing on specific surgical interventions such as hip and knee replacements, waiting times for these operations increased sharply between the first quarter of 2020 and the third quarter of 2022, but started to fall in the fourth quarter of 2022 and first quarter of 2023 (Figure 21).

In March 2023, the government set a goal to bring down waiting times for surgical operations to pre-pandemic levels by the end of 2024 (Ministry of the Interior and Health, 2023b). Substantial extra

**Figure 21. Waiting times for hip and knee replacements remained significantly higher in the first quarter of 2023 than before the pandemic**

Note: The EU average is unweighted. Sources: OECD Health Statistics 2023; Eurostat Database.
funding has been allocated to regions to address the backlog of elective treatments that developed during the pandemic. Yet, the temporary extension of the treatment guarantee from 30 to 60 days upon diagnosis was extended to the end of 2024.

**Denmark’s COVID-19 response led to significant increases in public spending on health**

Public spending on health in Denmark grew in real terms by 4% in 2020 and 9% in 2021 as a response to the pandemic (Figure 22). The substantial increase in government health spending during the pandemic gave more weight to spending by the national government in overall health expenditure.

![Figure 22. The pandemic led to a sharp increase in public spending on health in 2020 and 2021](chart)

In May 2020, the government agreed to accept budget over-runs and to compensate regions for any additional expenditure arising from the pandemic, and this agreement was continued into 2021. The health reform package in spring 2022 included funding of DKK 4 billion (EUR 540 million) for establishment of up to 25 local hospitals throughout the country, with the aim of strengthening local capacity to provide chronic care. A significant portion of the money must be invested in digital health solutions (Birk et al., 2023). As noted above, in 2023, substantial extra funding has been allocated from the state to the regions to address the backlog of elective treatments that emerged during the pandemic.

**Denmark’s Recovery and Resilience Plan includes some new health investments**

Denmark’s Recovery and Resilience Plan (RRP) – a key pillar of the EU’s response to the COVID-19 crisis – includes investments in health amounting to EUR 33 million or about 2% of the overall RRP funding (Figure 23). Denmark has allocated EUR 14 million of its RRP budget to investments in strengthening digital solutions in the health sector and EUR 10 million to scale up investments in emergency management and monitoring of critical supplies of medical products. EUR 7 million has also been allocated to study the effects and side-effects of COVID-19 vaccines.

![Figure 23. The Recovery and Resilience Plan prioritises investments in digital health and management of critical supply stocks](chart)

**Notes:** These figures refer to the original Recovery and Resilience Plan. The ongoing revision of the Plan might affect its size and composition. Some elements have been grouped together to improve the chart’s readability.

Reducing the risks of other public health threats: Denmark’s preparedness to antimicrobial resistance

Antimicrobial resistance (AMR) is a major public health concern in the EU, with estimates of about 35 000 deaths due to antibiotic-resistant infections (ECDC, 2022), and healthcare-associated costs of around EUR 1.1 billion per year (OECD/ECDC, 2019). Because antibiotic overprescription and overuse in humans are major contributors to the development of antibiotic-resistant bacteria, antibiotic consumption data are useful to evaluate the risk of AMR and the efficacy of programmes to promote their appropriate use.

Denmark has relatively low rates of antibiotic consumption compared to most other EU countries, and AMR rates as measured by methicillin-resistant Staphylococcus aureus (MRSA) bloodstream infections are also lower than in most EU countries. Denmark’s antibiotic consumption has decreased over the past decade, albeit less than in several other Nordic countries such as Finland and Sweden (Figure 24).

In 2017, the Danish Ministry of Health issued a new national action plan to combat AMR called the One Health Strategy Against Antibiotic Resistance. This outlined a number of key objectives to promote reduction of antibiotic use and prevention of resistance among humans and animals, including prudent use of antibiotics, further efforts to prevent infections, and strong international co-operation on AMR. Since 1996, the Danish Integrated Antimicrobial Resistance Monitoring and Research Programme has published yearly reports on use of antibiotics and occurrence of AMR. The findings from these reports have been used to develop measures to prevent increased occurrence of AMR through antimicrobial stewardship and development of successive One Health action plans.

6 Spotlight on mental health

The burden of mental ill health in Denmark is high

Although there are significant gaps in information about the prevalence of mental health issues in Denmark, as in other EU countries, available evidence suggests that mental health issues affect nearly 1 million Danes. According to estimates from the Institute for Health Metrics and Evaluation (IHME), more than one in six people in Denmark had a mental health issue in 2019 – a proportion slightly higher than the EU average (Figure 25). The most common mental disorders in Denmark are anxiety (estimated to affect 5.4 % of the population), depressive (4.4 %) and drug-use disorders (4.3 %).
The economic costs of mental ill health are substantial, with direct and indirect costs estimated at 5.4% of GDP in Denmark or nearly EUR 15 billion in 2015 (OECD/EU, 2018).

**Depression is reported more often by women and people in the lowest income group**

Gender and socioeconomic gaps in depression are substantial in Denmark. People on lower incomes are about three times more likely to report depression: 16% of men and 20% of women in the lowest income quintile reported depression compared to only 5% of men and 7% of women in the highest quintile in 2019 (Figure 26). These gaps are significantly larger than in most EU countries.

**Figure 26. Danes on low income are three times more likely to report depression as those on high income**

[Chart showing percentage of adults reporting depression by income quintile for Denmark and EU men and women.]

*Note: High income refers to people in the top income quintile (20% of the population with the highest income), whereas low income refers to people in the bottom income quintile (20% of the population with the lowest income).*

*Source: Eurostat Database (based on EHIS, 2019).*

**Suicide rates in Denmark have declined among men, yet remain significantly higher than those among women**

While a range of complex factors affect suicidal behaviours, mental health issues increase the risk of suicide. Suicide rates in Denmark are above the EU average for women and below it for men. Progress has been achieved over the past 15 years in reducing mortality rates from suicide in Denmark, particularly among men, but they remained much higher than rates among women (Figure 27).

During the first year of the pandemic in 2020, suicide rates decreased slightly among men, whereas they increased slightly among women. The proportion of young adults reporting suicidal thoughts and suicide attempts was not higher during the 2020 and 2021 COVID-19 national lockdowns than in previous years (Danielsen et al., 2023).

**Denmark’s mental healthcare provides free access to psychiatric treatment for all**

Responsibilities for mental healthcare in Denmark fall to a range of actors, with the state having a regulatory function. The mental healthcare system provides public services through cross-sector collaboration between the Ministry of Health and the Ministry of Social Affairs, and is based on shared responsibility with regions and municipalities. While regional bodies are responsible for the majority of inpatient and outpatient mental healthcare services, municipalities provide social services including preventive services, social services (such as social activities, housing and support for labour market participation), and alcohol and drug misuse interventions. Outpatient mental healthcare is
typically delivered by interdisciplinary community mental health teams made up of doctors, nurses, social workers, occupational therapists and other professionals. GPs play a gatekeeping role, and provide some care for mild-to-moderate mental health conditions. A new approach to care coordination aimed at strengthening professional multi-agency collaboration was successfully tested in the Central Region of Denmark, with the help of the European Commission’s Technical Support Instrument.

All residents in Denmark are entitled to equal and free access to mental health services. OOP payments only apply for people seeking care from private psychiatrists or psychologists, which raises concerns about access, as psychotherapy services are mainly provided in private settings. Since the 2007 health reform, the policy of de-institutionalisation – whereby beds in long-stay psychiatric hospitals are gradually being replaced by community mental health services – is ongoing. While outpatient contacts and services have increased, the delivery of community mental health services has been criticised for not providing enough services to meet the needs of people who are no longer hospitalised (Birk et al., 2023).

Over the past decade, efforts have been made to reduce the stigma attached to mental illness. The Danish Mental Health Fund, whose primary aims are to disseminate knowledge about mental illness and minimise prejudice, has established national programmes on depression, anxiety and schizophrenia. These are implemented in collaboration with municipalities and networks in the regions (Birk et al., 2023).

One in six Danes with unmet healthcare needs during the pandemic mentioned insufficient access to mental healthcare

As noted above, compared to other EU countries, only a small proportion of Danish people reported unmet healthcare needs during the pandemic (see Section 5.2). Only 8% of Danes reported unmet needs for healthcare in spring 2021 and spring 2022, according to the Eurofound survey. Among this group, 16% reported that these unmet needs were related to mental healthcare (Figure 28). This proportion was also smaller than the EU average of 22%.

Figure 28. One in six Danes with unmet healthcare needs during the pandemic said they were related to mental healthcare

Note: Survey respondents were asked whether they had any current unmet healthcare needs and, if so, for what type of care, including mental healthcare.
Source: Eurofound (2022).

Denmark’s 10-year mental health plan targets children and young people and those with severe disorders

In September 2022, the government announced a 10-year plan to improve psychiatry and mental health in Denmark, including 19 objectives and five initial priority areas. Children and young people, and adults with severe mental health disorders, have been identified as important target groups. The initial priorities are to: a) build an easily accessible supply of services in municipalities for children and young people with mental health issues; b) strengthen capacity for people with severe mental health issues to access psychiatric services at the regional level; c) provide information on mental health and pursue de-stigmatisation efforts; d) strengthen multi-disciplinary and evidence-based approaches to prevention and treatment; and e) support research into prevention and treatment of mental disorders.

The plan proposes a set of indicators to monitor progress towards achieving the various objectives. For example, for the objective of increasing the life expectancy of people with mental health disorders, the plan proposes to monitor indicators of suicide rates and excess mortality for this population group. Additional funding has been allocated to support implementation of the objectives and priorities (Ministry of the Interior and Health, 2022b).
7 Key findings

• Life expectancy at birth in Denmark in 2022 was more than half a year higher than the EU average (81.3 years compared to 80.7 years), but lower than in many other Nordic and western European countries. Life expectancy in Denmark fell by 0.2 years between 2019 and 2022, but this reduction was less than the EU average fall (0.6 years). Cancer is the leading cause of death in Denmark, and lung cancer remains the most frequent cause of death by cancer.

• Although tobacco smoking in Denmark has decreased sharply over the past two decades, smoking rates remain higher than in other Nordic countries. Excessive alcohol consumption among adults and adolescents also remains much higher than in other EU countries. While the obesity rate among adults was similar to the EU average in 2019 (16 %), this proportion has gone up over time, and more recent data show a further increase to 18.5 % in 2021.

• Health spending per capita in Denmark is higher than the EU average, and the share of public funding (85 %) is also greater than the EU average (81 %). Denmark’s universal tax-financed health system provides a comprehensive benefits package to all residents, although coverage is more limited for pharmaceuticals and dental care, as in other EU countries. Health spending as a share of GDP rose to 10.8 % in 2021, due mainly to the increase in public spending on health during the first two years of the pandemic.

• Denmark fares better than most EU countries on avoidable mortality, which points to an effective public health and healthcare system. Lung cancer, chronic obstructive pulmonary disease and alcohol-related deaths were the leading causes of preventable mortality in Denmark in 2020. Recent national efforts to prevent smoking and reduce alcohol drinking have focused on younger generations.

• Denmark was one of the few EU countries that was almost able to maintain the number of doctor consultations during the first year of the pandemic in 2020, thanks to extensive use of teleconsultations. However, hospital activities and elective surgical procedure numbers fell in 2020 and 2021, resulting in a backlog of patients waiting for treatment. Waiting times for surgical operations increased by 50 % between the first quarter of 2020 and the fourth quarter of 2022, and the increase was even greater for some interventions, such as hip and knee replacements.

• Workforce shortages are the main capacity constraint in addressing the backlog of patients created during the pandemic. The government has set a goal to bring down waiting times for surgical operations to pre-pandemic levels by the end of 2024, and has provided substantial additional funding to the regions to support increased surgical activities.

• The burden of mental health in Denmark is high, with estimates that over one in six people had a mental health issue in 2019. There are substantial gender and socioeconomic gaps in the prevalence of depression, with people on lower incomes – especially women – more likely to report depression. The government launched a 10-year plan in 2022 to improve psychiatry and mental health in Denmark, identifying children and young people, and adults with severe mental health issues, as particular target groups. The plan includes 19 objectives, along with a set of proposed indicators to monitor progress over time.
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Country abbreviations

Austria AT
Belgium BE
Bulgaria BG
Croatia HR
Cyprus CY
Czechia CZ
Denmark DK
Estonia EE
Finland FI
France FR
Germany DE
Greece EL
Hungary HU
Iceland IS
Ireland IE
Italy IT
Latvia LV
Lithuania LT
Luxembourg LU
Malta MT
Netherlands NL
Norway NO
Poland PL
Portugal PT
Romania RO
Slovakia SK
Slovenia SI
Spain ES
Sweden SE

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These Profiles are the result of a collaborative partnership between the Organisation for Economic Co-operation and Development (OECD) and the European Observatory on Health Systems and Policies, working in tandem with the European Commission. Based on a consistent methodology using both quantitative and qualitative data, the analysis covers the latest health policy challenges and developments in each EU/EEA country.

The 2023 edition of the Country Health Profiles provides a synthesis of various critical aspects, including:

- the current state of health within the country;
- health determinants, with a specific focus on behavioural risk factors;
- the structure and organisation of the health system;
- the effectiveness, accessibility and resilience of the health system;
- For the first time in the series, an account of the state of mental health and related services within the country.

Complementing the key findings of the Country Health Profiles is the Synthesis Report by the European Commission.

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